

1/10

FIG. 1

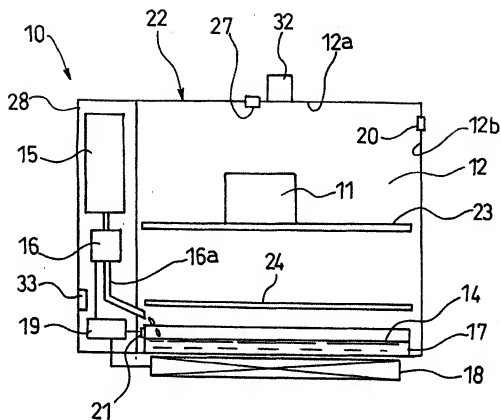
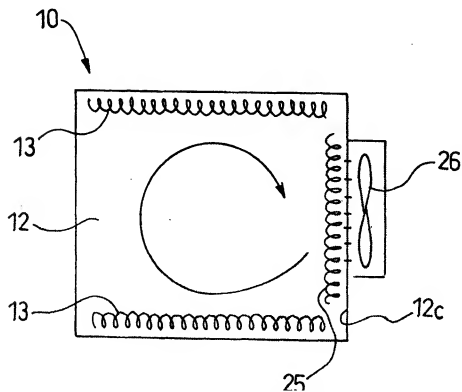
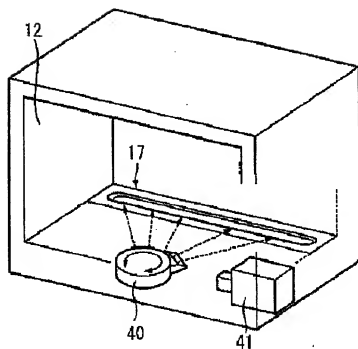


FIG. 2



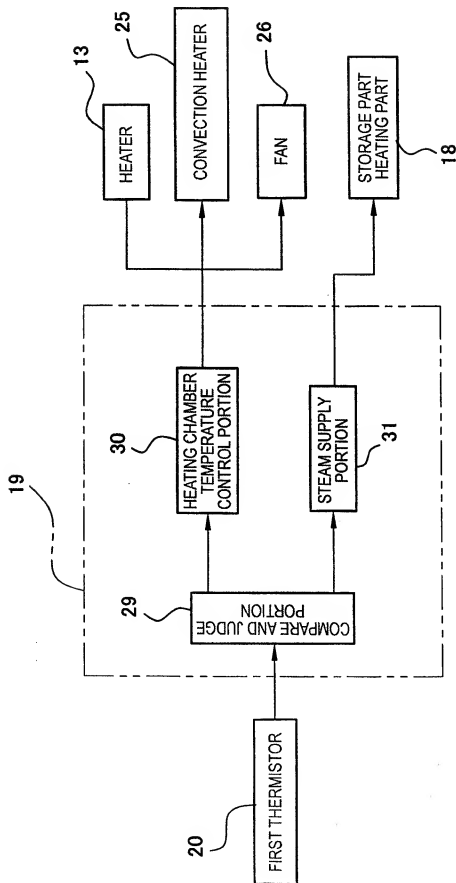
2/10

FIG. 3



3/10

FIG. 4



4/10

FIG. 5A

● WHEN HEATING CHAMBER INTERIOR TEMPERATURE IS LOW

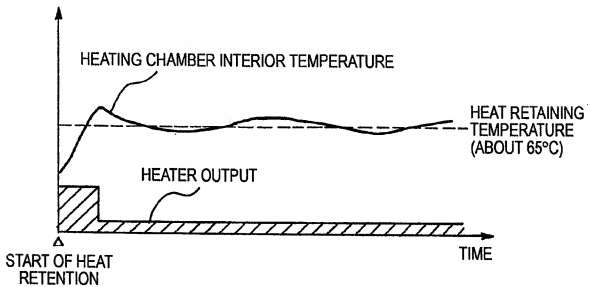
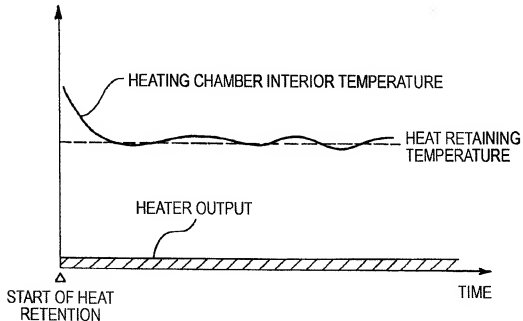


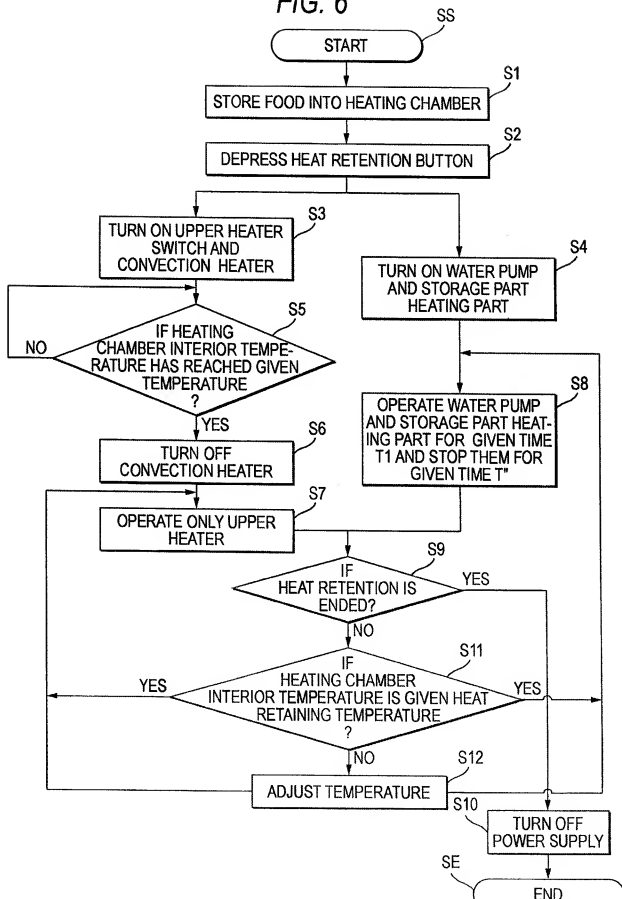
FIG. 5B

● WHEN HEATING CHAMBER INTERIOR TEMPERATURE IS ORIGINALLY HIGH
(FOR EXAMPLE, AFTER END OF OVEN COOKING)



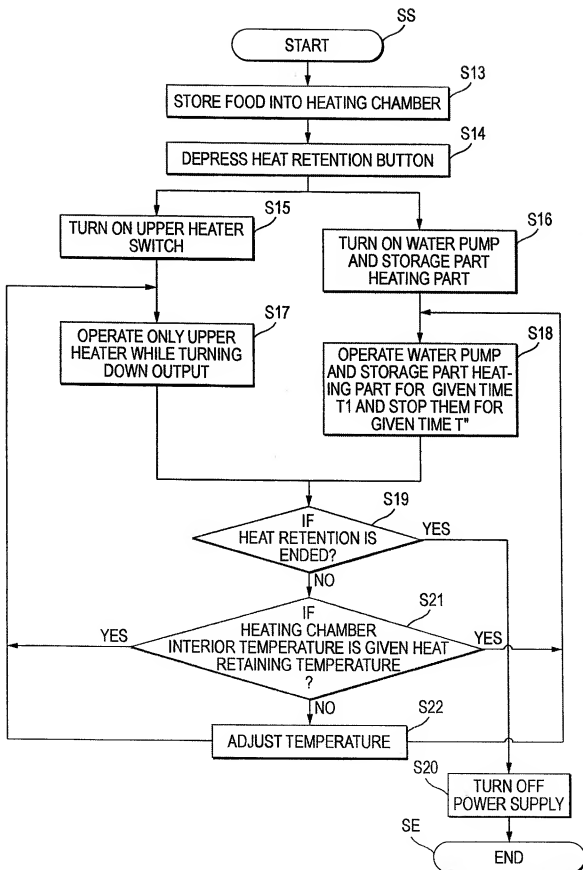
5/10

FIG. 6



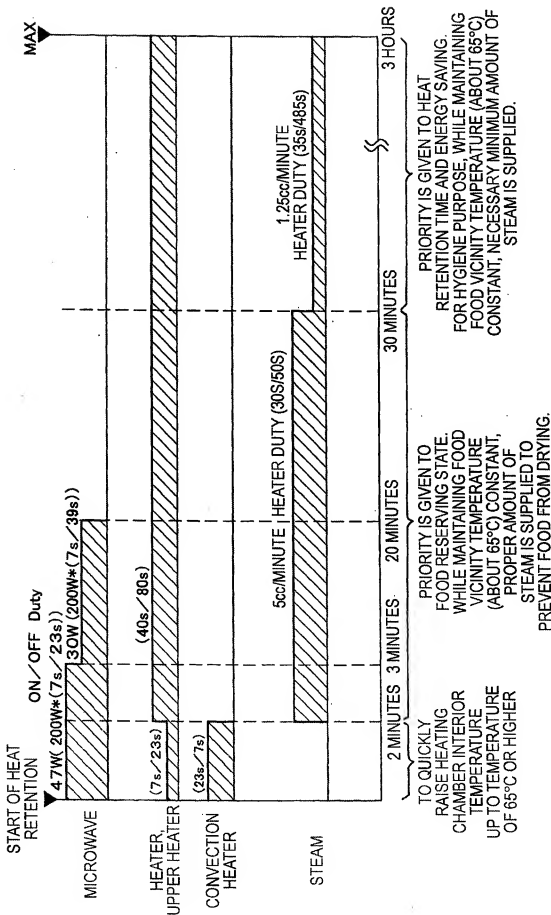
6/10

FIG. 7



7/10

FIG. 8



8/10

FIG. 9

	FOOD VICINITY TEMPERATURE (MULTIPLICATION PREVENTIVE EFFECT)	STATE OF FOOD (DAMAGE)	NEED OF WRAPPING	
			WITH WRAPPING	WITHOUT WRAPPING
MICROWAVE	▲ FOOD TEMPERATURE VARIES GREATLY DEPEND- ING ON FOOD QUANTITY	▲ FOOD DRIES DEPENDING ON FOOD QUANTITY AND TIME	○ WRAPPING IS INDISPENSABLE	× FOOD DRIES
HEATER	○ HEATING CHAMBER INTERIOR TEMPERATURE RISES QUICKLY BUT FOOD VICINITY TEMPERATURE DOES NOT RISE SO QUICKLY	× WHEN PRIORITY IS GIVEN TO THE RISE OF FOOD TEMPERATURE, FOOD DRIES	× WRAPPING CANNOT BE USED DEPENDING ON TEMPERATURE	× FOOD DRIES
STEAM	▲ IT TAKES TIME TO RAISE HEATING CHAMBER INTERIOR TEMPERATURE	▲ FOOD DOES NOT DRY, BUT SOME FOOD GETS WATERY	○	○
MICROWAVE + STEAM	▲ FOOD TEMPERATURE VARIES GREATLY DEPEND- ING ON FOOD QUANTITY	○ FOOD DRYING DUE TO FOOD QUANTITY AND TIME CAN BE REDUCED BY STEAM	○ WRAPPING IS NECES- SARY FOR LONG HEAT RETENTION	○ ~ FOOD DRIES DEPENDING ON TIME AND STEAM AMOUNT
HEATER + STEAM	○ HEATING CHAMBER INTERIOR TEMPERATURE RISES QUICKLY BUT FOOD VICINITY TEMPERATURE DOES NOT RISE SO QUICKLY	▲ FOOD DRIES DEPENDING ON FOOD QUANTITY AND TIME	○ WRAPPING IS NECES- SARY FOR LONG HEAT RETENTION	○ FOOD DRIES DEPENDING ON TIME AND STEAM AMOUNT
MICROWAVE + HEATER + STEAM	◎ HEATING CHAMBER INTERIOR TEMPERATURE CAN BE RAISED QUICKLY BY HEATER AND FOOD TEMPERATURE CAN BE RAISED BY MICROWAVES	○ FOOD DRYING DUE TO FOOD QUANTITY AND TIME CAN BE REDUCED BY STEAM	○ WRAPPING IS NECES- SARY FOR LONG HEAT RETENTION	○ FOOD DRIES DEPENDING ON TIME AND STEAM AMOUNT

9/10

FIG. 10

FOOD BACTERIA MULTIPLICATION TEMPERATURE AND EXTINCTION TIME IN HEATING TEMPERATURE

BACTERIA OF FOOD	OPTIMUM MULTIPLICATION TEMPERATURE	MULTIPLICATION TIME	HEATING TEMPERATURE	EXTINCTION TIME
NORMAL BACTERIA	ABOUT 30 ~ 40°C	ABOUT 30 MINUTES	—	—
QUICK MULTIPLICATION BACTERIA	ENTERITIS VIBRIO	ABOUT 7 ~ 8 MINUTES	ABOUT 60°C	ABOUT 30°C
	COLON BACILLUS	ABOUT 15 MINUTES	ABOUT 60°C	ABOUT 30°C

MULTIPLICATION TIME = LOGARITHMIC NUMBER PERIOD
 (TIME NECESSARY FOR THE NUMBER OF CELLS ABOUT $10^2/g \rightarrow$ ABOUT $10^8/g$)

10/10

FIG. 11

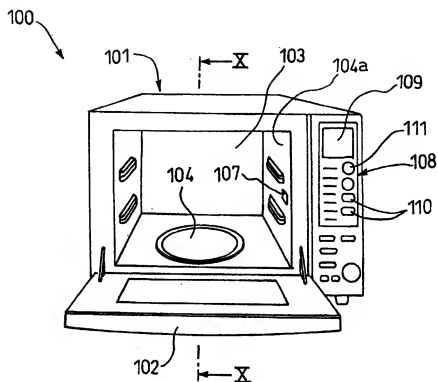


FIG. 12

